BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work: Modified Estimate for Improvements to Roads & Drains at HMT 1st, 2nd & 3rd Block in ward No. 09 Vidyaranyapura sub Division.

								Estimate Cost Rs.	2968560.00
Sl No	**Description of item**	**Unit**	**No**	**L**	**B**	**D**	**Qty**	**Rate**	**Amount**
1	KSRRB 300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. **Page No. 141 / Item No. 19.1 / PWD SR 2015-16**	Cum							
	For Drain Desilting								
	From GKVK Double Road		2	71.00	0.45	0.45	28.76		
	2nd Main Road Somanna Garden		2	145.00	0.45	0.35	45.68		
	Cross Road		2	30.00	0.45	0.35	9.45		
	1st Main Road Somanna Garden		2	85.00	0.45	0.35	26.78		
	1st Main Road N/S Cross Road		2	70.00	0.45	0.35	22.05		
	1st Main Road S/S Cross Road 1		2	120.00	0.45	0.45	48.60		
	1st Main Road S/S Cross Road 1 Interrior		2	25.00	0.45	0.35	7.88		
			2	26.00	0.45	0.35	8.19		
	1st Main Road S/S Road 2		2	62.00	0.45	0.35	19.53		
	12th Cross HMT LO 2nd Block		2	206.00	0.45	0.35	64.89		
	Berm Cutting								
	2nd Main Road Somanna Garden		2	145.00	0.60	0.20	34.80		
	1st Main Road Somanna Garden		2	85.00	0.60	0.20	20.40		
	1st Main Road N/S Road		2	70.00	0.60	0.20	16.80		
	1st Main Road S/S Road 2		2	62.00	0.60	0.20	14.88		
	12th Cross HMT LO 2nd Block		2	206.00	0.60	0.20	49.44		
	For Road Work								
	1st Main Road S/S Road 1		1	60.00	4.50	0.20	54.00		
	1st Main Road S/S Road 1 Interrior		1	25.00	4.50	0.20	22.50		
			1	26.00	4.50	0.20	23.40		
	CC Road		1	42.00	6.00	0.20	50.40		
	CC Drain Opp Sapthagiri Clinic Thindlu N/S		1	22.00	0.80	0.75	13.20		
	CC Drain Opp Sapthagiri Clinic Thindlu S/S		1	23.00	0.80	0.75	13.80		
	Total Qty						**595.41**	TP	
	Total Qty upto 125%						**479.13**	83.16	**39844.00**
	Total Qty Above 125%						**116.29**	86.92	**10107.00**
	PWD SR 2016-17 Basic Rate	82.00							
	Area Weightage @ 6%	4.92							
	Total	**86.92**							
2	Removing B.S Slab of Drain and stacking **Page No. 25 / Item No. 5.32 / PWD SR 2015-16**	Sqm							
	From GKVK Double Road		2	71.00		1.35	191.70		
	2nd Main Road Somanna Garden		2	145.00		1.35	391.50		
	Cross Road		2	30.00		1.35	81.00		
	1st Main Road Somanna Garden		1	85.00		1.35	114.75		
	1st Main Road N/S Road		2	70.00		1.35	189.00		
	1st Main Road S/S Road 1		2	120.00		1.35	324.00		
	1st Main Road S/S Road 1 Interrior		2	25.00		1.35	67.50		
			2	26.00		1.35	70.20		
	1st Main Road S/S Road 2		2	62.00		1.35	167.40		
	12th Cross HMT LO 2nd Block		2	206.00		1.35	556.20		
							2153.25		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Consider 10% for Removing and Reseting						**249.78**		
	Opp Sapthagiri Clinic Thindlu N/S		1	22.00		0.75	16.50		
	Opp Sapthagiri Clinic Thindlu S/S		1	23.00		0.75	17.25		
							283.53	63.72	**18066.00**
3	Refixing stone slabs of drains and pointing in C.M (1:3) **Page No. 25 / Item No. 5.33 / PWD SR 2015-16**	Sqm							
			Qty Vide Item No. 2				**283.53**	78.84	**22353.00**
4	KSRB 4-1.3 : Providing and laying in position plain cement concrete of **mix 1:4:8 with OPC cement @ 180 kgs with 40mm** and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. **No. 12/ Item No. 4.3/ PWD SR 2015-16**	Cum							
	CC Road		1	42.00	6.00	0.15	37.80		
	CC Drain Opp Sapthagiri Clinic Thindlu N/S		1	22.00	0.80	0.15	2.64		
	CC Drain Opp Sapthagiri Clinic Thindlu S/S		1	23.00	0.80	0.15	2.76		
							43.20		
							3.71	5070.60	**18825.00**
							39.49	5159.02	**203717.00**
	PWD SR 2016-17 Basic Rate	4867.00							
	Area Weightage @ 6%	292.02							
	Total	**5159.02**							
5	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal**, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, **Page No. 13 / Item No. 4.11 / PWD SR 2015-16**	Cum							
	For CC Road		1	42.00	6.00	0.125	31.50		
	CC Drain Bottom N/S		1	22.00	0.80	0.15	2.64		
	CC Drain Bottom S/S		1	23.00	0.80	0.15	2.76		
	CC Drain Side Wall N/S		2	22.00	0.15	0.45	2.97		
	CC Drain Side Wall S/S		2	23.00	0.15	0.45	3.11		
							42.98	6198.12	**266364.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
6	KSRB 4.9.2: Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **TMT Bars FE 500 Page No. 17 / Item No. 4.46.2 / PWD SR 2015-16**	Tonne							
			0.06	11.48			**0.69**	69805.80	**48061.00**
7	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **vertical surface such as walls** at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 **Page No. 15 / Item No. 4.31 / PWD SR 2015-16**	Sqm							
	CC Road		2	42.00		0.30	25.20		
	CC Drain Side Wall N/S		4	22.00		0.45	39.60		
	CC Drain Side Wall S/S		4	23.00		0.45	41.40		
							106.20	306.72	**32574.00**
8	KSRRB 300-47: scarifying kankar/gravel/metal crust upto 150mm thick with pick axes and disposal of stuff within a lead of 100 meters including cost of all labour charges complete as per specifications MORTH chapter 3, **No. 146 / Item No. 19.53 / PWD SR 2015-16**	Sqm							
	2nd Main Somanna Garden		1	71.00	4.50		319.50		
	1st Main Road S/S Road 1		1	75.00	4.50		337.50		
							657.00	25.92	**17029.00**
9	KSRRB M400-17: Providing, laying spreading and compacting graded stones aggregate to **wet mix macadam** specifications including premixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying, in uniform layers with paver in sub base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per MORTH specification NO. 406, **Page No. 157 / Item No. 20.18 / PWD SR 2015-16**	Cum							
	2nd Main Road Somanna Garden		1	145.00	5.00	0.20	145.00		
	Cross Road		1	30.00	5.00	0.20	30.00		
	1st Main Road Somanna Garden		1	85.00	5.50	0.20	93.50		
	1st Main Road N/S Road		1	70.00	4.50	0.20	63.00		
	1st Main Road S/S Road 2		1	62.00	4.50	0.20	55.80		
	12th Cross HMT LO 2nd Block		1	206.00	6.80	0.20	280.16		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
							667.46		
	Consider 15% of the total Qty						**100.12**		
	From GKVK Double Road		1	71.00	4.50	0.30	95.85		
	1st Main Road S/S Road 1		1	120.00	4.50	0.23	124.20		
	1st Main Road S/S Road 1 Interrior		1	25.00	4.50	0.23	25.88		
			1	26.00	4.50	0.23	26.91		
	Total Qty						**372.95**	TP	
	Total Qty upto 125%						**170.63**	1713.96	**292444.00**
	Total Qty Above 125%						**202.33**	1768.08	**357734.00**
	PWD SR 2016-17 Basic Rate	1668.00							
	Area Weightage @ 6%	100.08							
	Total	**1768.08**							
10	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM, WMM including cleaning of road surface and spraying primer at the rate of 0.60 Kg / sqm using mechnical means complete as per specifications. MORTH specification NO. 502, **Page No. 160 / Item No. 21.6 / PWD SR 2015-16**	Sqm							
	From GKVK Double Road		1	71.00	4.50		319.50		
	1st Main Road S/S Road 1		1	120.00	4.50		540.00		
	1st Main Road S/S Road 1 Interrior		1	25.00	4.50		112.50		
			1	26.00	4.50		117.00	TP	
							1089.00	32.40	**35284.00**
11	Lead for Disposal of Debris shall be payable at carage rates by Mechanical means inlcuding loading and unloading. **From 0.00 to 11.90 Km (PWD SR 2015-16** Rates P No 139)	Cum							
	Total Qty		Qty. Vide Item No. 1				**595.41**	TP	
	Total Qty upto 125%						**479.13**	106.34	**50950.00**
	Total Qty Above 125%						**116.29**	112.44	**13076.00**
	Add loading and unloading Charges **It No 17.1**	68.00							
	Average weight of earth 1.28 tonne / kg for	38.08							
		106.08							
	Area Weightage @6%	6.36							
	Total	**112.44**							
	EIRL								
12	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete **Page No. 25 / Item No. 5.31.1 PWD SR 2016-17**	Sqm							
			Qty Vide Item No. 2 x 5%				249.78		
							249.78	825.74	**206251.00**
	Basic Rate	779.00							
	Area Weightage @ 6%	46.74							
	Total	**825.74**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
13	KSRRB M300- Construction of Embankment with Material Gravel / Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305 **Page No. 148 / Item No. 19.60, PWD SR 2016-17**	cum							
	1st Main Road S/S Road 1		1	120.00	4.50	0.30	162.00		
	1st Main Road S/S Road 1 Interrior		1	25.00	4.50	0.30	33.75		
			1	26.00	4.50	0.30	35.10		
							230.85	320.12	**73900.00**
	Basic Rate	302.00							
	Area Weightage @ 6%	18.12							
	Total	**320.12**							
14	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 **Page No. 161 / Item No. 21.7m PWD SR 2016-17**	Sqm							
	2nd Main Road Somanna Garden		1	145.00	5.00		725.00		
	Cross Road		1	30.00	5.00		150.00		
	1st Main Road Somanna Garden		1	85.00	5.50		467.50		
	1st Main Road N/S Road		1	70.00	4.50		315.00		
	1st Main Road S/S Road 2		1	62.00	4.50		279.00		
	12th Cross HMT LO 2nd Block		1	206.00	6.80		1400.80		
							3337.30	11.66	**38913.00**
	PWD SR 2016-17 Basic Rate	11.00							
	Area Weightage @ 6%	0.66							
	Total	**11.66**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
15	KSRRB 500-11. Providing and laying bituminous macadam on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixd material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, but excluding cost of primer / tack coat including lead, lift and cost of all materials, labour, HOM of machineries complete as per specifications. MORTH /Chapter 5 - **using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 3.3 % VG-30 Bitumen Page No. 162 / Item No. 21.11.6, PWD SR 2016-17**	cum							
	1st Main Road Somanna Garden		1	85.00	5.50	0.050	23.38		
	2nd Main Road Somanna Garden		1	145.00	5.00	0.050	36.25		
	12th Cross HMT LO 2nd Block		1	205.00	6.80	0.050	69.70		
	1st Main Road N/S Road		1	70.00	4.50	0.050	15.75		
	1st Main Road S/S Road 2		1	62.00	4.50	0.050	13.95		
							159.03		
	Consider 10% of the Total Qty						**15.90**		
							15.90	5237.46	**83289.00**
	PWD SR 2016-17 Basic Rate	4941.00							
	Area Weightage @ 6%	296.46							
	Total	**5237.46**							
16	KSRRB M500-19. Providing and laying **bituminous concrete 40 mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - **using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 6 % VG-30 Bitumen Page No. 165 / Item No. 21.22.6, PWD SR 2016-17**	Cum							
	From GKVK Double Road		1	71.00	4.50	0.040	12.78		
	1st Main Road Somanna Garden		1	85.00	5.50	0.040	18.70		
	2nd Main Road Somanna Garden		1	145.00	5.00	0.040	29.00		
	12th Cross HMT LO 2nd Block		1	206.00	6.80	0.040	56.03		
							116.51	7270.54	**847105.00**
	PWD SR 2016-17 Basic Rate	6859.00							
	Area Weightage @ 6%	411.54							
	Total	**7270.54**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
25	KSRRB M500-18. Providing and laying **semi dense bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 508 complete in all respects complete as per specifications. - **using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (25 mm to 30 mm) with 5 % VG-10 Bitumen Page No. 164 / Item No. 21.20.12 PWD SR 2016-17**	cum							
	Cross Road		1	30.00	5.00	0.030	4.50		
	1st Main Road N/S Road		1	70.00	4.50	0.030	9.45		
	1st Main Road S/S Road 2		1	62.00	4.50	0.030	8.37		
	1st Main Road S/S Road 1		1	120.00	4.50	0.030	16.20		
	1st Main Road S/S Road 1 Interrior		1	25.00	4.50	0.030	3.38		
			1	26.00	4.50	0.030	3.51		
							45.41	6445.86	**292674.00**
	PWD SR 2016-17 Basic Rate	6081.00							
	Area Weightage @ 6%	364.86							
	Total	**6445.86**							
							Total		**2968560.00**

Rupees Twenty Nine Lakh(s) Sixty Eight Thousand Five Hundred Sixty Only

Certificate:

1 The work spot has been inspected and the work is found necessary.
2 This Modified Estimate is prepared as per Tender Premium and +/- 2016-17 SR.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division